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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,361	01/19/2001	Ya-An Cheng	API078	7125

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NAIPO (NORTH AMERICA INTERNATIONAL PATENT OFFICE)  
P.O. BOX 506  
MERRIFIELD, VA 22116

EXAMINER
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DEB, ANJAN K

ART UNIT	PAPER NUMBER
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2858

DATE MAILED: 04/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/764,361	Applicant(s) CHENG ET AL.	
	Examiner Anjan K Deb	Art Unit 2858	<i>AW</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4.6</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 8,11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8,11 recites the limitation "the monitor" in "display panel". There is insufficient antecedent basis for this limitation in the claim.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-4, 6-10, 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Okamoto (US 5,214,509).

Re claims 1, 4, 8, 11 Okamoto discloses video display panel test circuit (Fig. 1) and method comprising displaying panel (display device), connector (2R, 2G, 2B, 2F, 2E), video

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display circuit (10R, 10G, 10B)(column 2 lines 61-68), self testing circuit including testing signal generator (12), detecting circuit for sensing whether computer 2 is connected (column 3 lines 67-68, column 4 lines 1-10) and detecting circuit switches off switch (Q1) circuit (signal E and pulse D is not generated)(column 3 lines 47-59) to avoid testing signal generated from testing signal generator 12 (column 3 lines 51-59), and when no video signal transmitted from computer is detected (display device not connected) switches on switch circuit (Q1) (signal E is generated)(column 3 lines 67-68, column 4 lines 1-14). Generating a false video signal is considered simulating video signals for testing video display.

Re claims 3, 7, 9-10, 12-13 Okamoto discloses testing signal is generated from H-Blank signal (BLANKING PULSE) and displaying testing image on a display panel (display device)(column 4 lines 1-20)(column 5 lines 38-45)(Fig. 2).

Re claim 6, Okamoto discloses transistor switch (Q1) that switches off so that signal E is not generated when computer 2 is normally connected to display unit 6 (Fig. 2).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto (US 5,214,509) in view of Sakuda (US 5,886,545).

Re claim 2, Okamoto discloses all of the claimed limitations as set forth above except expressly disclosing DSUB connector.

Sakuda discloses DSUB connector in a monitor display device for connecting R, G, and B and horizontal and vertical synchronizing signals to the pins of the DSUB connector.

At the time of the invention it would have been obvious for one of ordinary skill in the art to modify Okamoto by adding DSUB connector disclosed by Sakuda for connecting video signals to the pins of the DSUB connector facilitating automatic connection and disconnection of signal input to video display unit.

6. Claims 1-2, 4, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 4,766,493).

Re claims 1-2, 4, Kim discloses video display panel test circuit comprising self testing circuit (Fig. 2) comprising switch (TR3) connected to input terminal Vi of displaying circuit, testing signal generator (R1, B+) (column 3 lines 1-19) detecting circuit for sensing whether computer is connected (detecting abnormal state) and detecting circuit switches off switch circuit (TR3) to avoid testing signal generated from testing signal generator (R1,B+)(column 2 lines 61-68), and when no video signal transmitted from computer is detected (detecting abnormal state) switches on switch circuit TR1 (column 3 lines 1-19).

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Kim did not expressly disclose connector electrically connected to input port of displaying circuit.

At the time of the invention it would have been obvious for one of ordinary skill in the art to modify Kim by adding connector for disconnecting monitor signal cable connected to computer when computer system is in abnormal state (column 2 lines 61-66).

Re claim 6, Kim discloses transistor (Q3) that switches off so that testing signal can be input to port Vi from supply source (B+, R1) when computer is not connected to display unit 6 (Fig. 2).

***Allowable Subject Matter***

Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claim 5 is allowable because the prior art does not teach a connector including an EPSI pin which is grounded when detecting the monitor is connected with the computer and floating the EPSI pin when detecting the monitor is not connected with the computer in combination with remaining claims limitations.

*Pertinent Art*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Park (US 5,999,148) discloses self-test device for monitor comprising PC connected to connector 12 for outputting video signal for display in monitor 19 and a test circuit for generating test signals when PC is not connected to monitor (Fig. 3-4).

Jun (US 5,781,250) discloses self-testing of monitor connected to computer 11 by DSUB connector including input switching and self-test circuit (Fig. 2).

Irvin (US 4,772,948) discloses self-testing a video display system having RGB monitor controlled by computer 10 (Fig. 1).

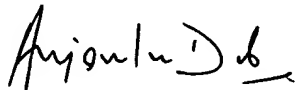
Buckley et al. (US 4,752,825) discloses testing video display unit comprising simulator and analyzer having an interface connector.

Geokezas (US 4,220,972) discloses EPSI signal representing threshold value of bright signal for the extraction of low contrast objects in a video image.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Anjan K. Deb whose telephone number is 571-272-2228. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le, can be reached at (571) 272-2233.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone numbers are (703)-308-0956 and (703)-305-4900.



**Anjan K. Deb**  
Patent Examiner  
Art Unit: 2858  
4/9/04

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